

WHAT IS CLAIMED IS:

1. An apparatus for manufacturing an integrated circuit device, comprising:
a chamber for containing a fluid therein; and

5 a guide, seated in the chamber, on which a plurality of wafers having an outer circumferential edge are located, the guide including at least one supporting member for supporting the wafers and a stopper member for preventing the wafers supported by the supporting member from contacting adjacent wafers.

10 2. The apparatus as set forth in claim 1, wherein each supporting member and each stopper member has a plurality of slots, the outer circumferential edges of the wafers being inserted into the slots.

15 3. The apparatus as set forth in claim 2, wherein the stopper member is in contact with a portion of the outer circumferential edge at a higher position than a portion of the outer circumferential edge that is contacted by the supporting member.

4. The apparatus as set forth in claim 1, wherein the guide comprises:
a first supporting member for supporting the wafers at a first point; and
20 a second supporting member for supporting the wafers at a second point which is lower than the first point.

5. The apparatus as set forth in claim 2, wherein the slots of each supporting member have either a substantially Y-shaped configuration or a substantially V-shaped
25 configuration, and wherein the stopper member has a substantially V-shaped wafer configuration.

6. The apparatus as set forth in claim 4, wherein the guide further has a third supporting member; and wherein the third supporting member and the second supporting
30 member are substantially symmetrical with respect to the first supporting member.

7. The apparatus as set forth in claim 1, further comprising a transfer robot for loading and/or unloading the wafer to and/or from the guide,
the transfer robot including:

5 a first arm for supporting a first portion of the edge of the wafer; and
a second arm for supporting a second portion of the edge of the wafer, the second arm being shorter than the first arm.

8. The apparatus as set forth in claim 1, further comprising a transfer robot for loading and/or unloading the wafers to and/or from the guide,
10 the transfer robot including:
a first arm for supporting a first position of the edge of the wafer; and
a second arm for supporting the edge of the wafer at a second position which is positioned higher than the first position of the first arm.

15 9. The apparatus as set forth in claim 8, wherein the first arm includes a plurality of slots into which the wafers can be inserted.

10 10. The apparatus as set forth in claim 8, wherein the second arm includes a load portion for engaging and moving the wafers.

11. The apparatus set forth in claim 10, wherein the load portion engages the wafer at a contact edge between wherein the edge is in contact with the stopper member and wherein the edge is in contact with the first arm.

25 12. The apparatus as set forth in claim 10, wherein the load portion further has a plurality of contact edges for dispersing a force transmitted to the wafer by the second arm.

13. The apparatus as set forth in claim 10, wherein the load portion has first and second contact edges, and a body portion which interconnects the first and second contact
30 edges, said load portion being rotatable within the range of a predetermined angles.

14. The apparatus as set forth in claim 8, wherein the second arm further has guide grooves for guiding the rotation of the load portion.

15. The apparatus as set forth in claim 14, wherein the guide groove has an aperture defined therein, and the load portion further includes a rotation member rotatably inserted into the aperture.

5 16. The apparatus as set forth in claim 1, wherein the chamber is employed for cleaning the wafers.

17. An apparatus for manufacturing an integrated circuit device, comprising:
a chamber;

10 a guide, seated in the chamber, on which a plurality of wafers having outer circumferential edges are located, the guide including at least one supporting member having a plurality of slots into which the wafers are inserted, and a stopper member into which an edge of the respective wafers is inserted for preventing the wafers inserted into the slots from contacting adjacent wafers; and

15 a transfer robot for loading and/or unloading the wafers to and/or from the guide.

18. The apparatus as set forth in claim 17, wherein the transfer robot includes:
a first arm for supporting an edge of the wafers at a higher point than the edge of the wafers that are in contact with the supporting member; and

20 a second arm for applying a force to an edge of a wafer at a higher point than the edge of the wafer in contact with the stopper member.

19. An apparatus for manufacturing an integrated circuit device, comprising:
a chamber for containing a fluid therein;

25 a guide seated in the chamber for supporting a plurality of wafers, the guide including a first supporting member including slots having a Y-shaped configuration into which the wafers are inserted;

a second supporting member including slots having a V-shaped configuration into which the wafers are inserted;

30 a stopper member including slots having a V-shaped configuration in contact with the wafer, the point of contact of the wafers with the stopper member being at a higher point than the point at which the wafers are supported by the second supporting member; and

a transfer robot for loading and/or unloading the wafers to and/or from the guide.

20. The apparatus as set forth in claim 19, wherein the transfer robot includes:
a first arm for supporting a first position of the edge of the wafer; and
a second arm for supporting the edge of the wafer at a second position higher than the first position of the first arm.